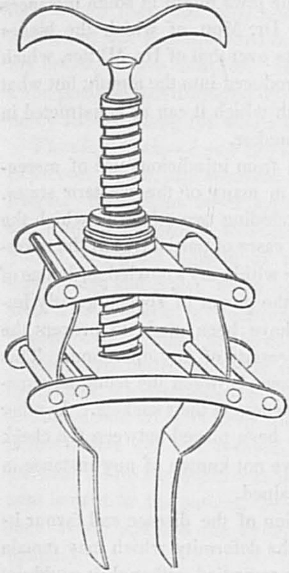
ART. VIII.—*Two cases of Immobility of the Lower Jaw, successfully treated.* By DANIEL BRAINARD, M. D., Professor of Anatomy in the Medical Department of the St. Louis University.

SYGNA Jouçou, ætat. nine years, has had for years an immobility of the lower jaw almost complete, its movements being so slight as scarcely to be perceptible. It was produced by a salivation occasioned by the injudicious use of calomel during a remittent fever.

Sept. 1, 1841.—The case presented the following appearances:—On the right side, at the angle of the mouth, there is a firm cicatrix half an inch in diameter, the result of an ulceration which had involved the entire thickness of the cheek. It extended in form of a firm band between the gums of the canine teeth of the upper and lower jaws, forming a barrier to the passage of any thing within the cheek. From this cicatrix to the root of the coronoid process, the jaws are united by a ligamentous structure to which the inner surface of the cheek firmly adheres. On the left side a similar band, to which the cheek is attached, extends from the coronoid process to the dentes cuspidati. The contraction of these structures has been so firm that the face is considerably shortened and deformed, the cheeks projecting, and the superior incisors, pressed from within by the inferior, stand out almost horizontally and are not covered by the lips. The speech is scarcely intelligible, the breath is offensive, she can take no solid food, and her health is much impaired.

On the 7th September, in presence of Dr. S. Willard, and Mr. Wm. Butterfield, student of medicine, the following operation was performed for her relief. The cicatrix on the right side was separated from the gums above and below, and the cheek detached freely from its adhesions; the ligament which extended between the jaws was then divided—it was very firm. The same process was then repeated to the requisite extent on the left side. The attachments being thus in a good measure removed, strong efforts were made to separate the jaws with the hands, but without success. Recourse was then had to a screw and lever, prepared for the purpose, by the aid of which the jaw was without difficulty depressed.

The instrument made use of for the purpose was formed by adapting two small plates of steel to the common tourniquet divested of its band. These being passed through the apertures in the lower part of the tourniquet, their superior recurved extremities resting under the rollers of the bridge, and the other ends being brought in contact by a gentle curvature, it is only necessary to turn the screw in order to separate these latter to the required extent. A glance at the accompanying figure, which represents the plates slightly separated, will render this description intelligible.



On opening the mouth nearly all the deciduous teeth, except the incisors, were found, with the alveolar processes, lying quite loose, keeping up ulcerations and giving rise to the fetor of the breath before mentioned. Small blocks of wood were placed between the incisor teeth in such a manner as to keep the mouth fully open, and allowed to remain during the period of cicatrization, being only removed to allow the patient to take food and drinks. The use of these was by degrees discontinued, the jaws were to a certain extent approximated, and at present, June 1st, 1843, more than twenty months since the operation, there is three quarters of an inch between the teeth, the speech is restored, she takes any kind of solid food, and the deformity is entirely removed.

Case II.—Sophia Thill, ætat. 17 years, had in February 1842 a remittent fever, for which she took calomel to ptyalism. Ulceration of the left cheek followed from which there remained a deep cicatrix, an inch in breadth, which involved slightly the anterior margin of the masseter muscle.

On the 17th July 1842, a similar operation to the former was performed. In five weeks the wound was cicatrized, the patient was able to open the mouth more than an inch, and the movements of the jaw were perfect. Such was its condition also ten months later.

In a case similar to the latter, reported in the American Journal of the Med. Sciences for Nov. 1829, Dr. Mott divided the cheek to get at the adhesions, which, however, was not done by Dr. Mighels in a case reported in the same Journal, No. 17. In a case resembling the first, Dr. Mott performed an "autoplastic" operation, removing the cicatrix and taking the necessary integument to fill the space from the side of the neck and face, "as the only means of overcoming the closure of the jaw." The result of the first case, given above, shows satisfactorily that this may be effected to the requisite extent by other means. Indeed the method adopted was only a modified application of the same principle, autoplasty after the method of France or the French method. The free separation of the cheek brings it, when the mouth is pressed open, from above and below to supply the place of the lost substance; in this situation it adheres, leaving a portion of its substance free, between the gums of the upper and lower jaws, to which it is fixed.

The instrument employed to separate the jaws might in some instances have an advantage over that employed by Dr. Mott, of which the blades diverge very much when open, and in others over that of Dr. Mütter, which in a case of perfect closure could not be introduced into the mouth; but what especially recommends it is the facility with which it can be constructed in any place without the aid of an instrument maker.

Ulcerations and sloughing of the mouth from injudicious use of mercurials are accidents of excessive frequency in many of the western states. In addition to the cases here given, and excluding two others in which the sloughing resulted fatally, not less than five cases of partial loss of the movements of the jaw from this cause have come within my knowledge; in one of these the tongue had been involved and the power of speech greatly impaired. From their frequency, attempts have been made to prevent the closure of the jaw and thus obviate the necessity of any operation. This has been attempted by putting some substance between the teeth, an expedient which does not succeed, from their looseness in their sockets. In other cases, pieces of silver or other metal have been placed between the cheek and gums to prevent their union, but I have not known of any instance in which a favourable result has thus been obtained.

Measures calculated to limit the extension of the disease and favour its speedy cure are to be put in practice, and the deformity which may remain can in most instances be in a great degree remedied, although it could not be prevented, by surgical means.

CHICAGO, June 5th, 1843.

ART. IX—*Case of Traumatic Tetanus, in which the Sulphate of Quinia was successfully used.* By JOHN W. MALONE, M. D., of Quincy, Florida.

ON the 15th of May, my colleague, Dr. William Booth, was called to see a negro girl about 12 years old, of sound constitution, labouring under the usual symptoms of tetanus, particularly that variety called opisthotonos. The history of the case was as follows:—About ten or twelve days previously, she said, "she stuck a nail in her foot," to which a lye poultice was applied, but suffering no farther inconvenience from it, no particular attention was given her, until the muscles of the extremities became rigid, with inability to move without inducing spasm; stiffness of the jaw supervened, and the spine was drawn back in a curve, all of which was supposed to have been produced from a fall she received on the day these symptoms occurred. She was bled, had her bowels operated on and took morphia, but the symptoms became more violent, and excited in the minds of the family, the suspicion that they might be produced from the wound in the